Abstract

A sensor element (10) is described, which is used in particular for detecting a physical property of a measuring gas, preferably for determining the oxygen partial pressure in an exhaust gas of an internal combustion engine. The sensor element (10) contains at least one electrochemical measuring cell, which includes a first electrode (31, 131) and a second electrode (32, 132), which are electrically connected by a solid electrolyte (21, 121, 122, 125). The second electrode (32, 132) is in a gas chamber (41, 141), which is connected to the measuring gas located outside the sensor element (10) via a first element (61, 161) having a catalytically active material and a second diffusion-limiting element (62, 162). The first element (61, 161) has a length of at least 1 mm in the diffusion direction of the measuring gas.

(Figure 1)